SECTION 9-16, FENCE AND GUARDRAIL
May 28, 1996

9-16.1(1) General
The following is added after the first paragraph:

9-16.1(1)A Class 1 Material
Class 1 material may be used for chain link fence construction statewide.

The following is added after the last paragraph:

9-16.1(1)B Class 2 Material
Class 2 material may be used for chain link fence posts for construction east of the Cascades only.

Class 2 pipe shall meet the outside dimensions of ASTM A 53, Schedule 40 and have a minimum yield strength of 50,000 psi. Class 2 pipe shall be hot-dip zinc coated with 0.9 ounces per square foot of exterior surface and shall be over coated with clear acrylic. The internal surface of pipe shall have a protective coating of hot-dip zinc or zinc rich paint with a minimum thickness of 0.3 mils.

9-16.1(2) Posts
The first two paragraphs are revised to read:

9-16.1(2)A Roll-formed Posts
Roll-formed posts for chain link fence shall be of Class 1 material and shall be the shape, size, and weight per foot shown in the Standard Plans. Roll-formed end, corner, and pull posts shall be made from 0.1345-inch minimum thickness sheet steel and shall have integral fastening loops to connect to the fabric for the full length of each post. Roll-formed line posts shall be made from 0.110-inch minimum thickness sheet steel for Type 3 and Type 4 fences and shall be made from 0.120-inch minimum thickness sheet steel for Type 1 and Type 6 fences.

9-16.1(2)B Pipe Posts, Class 1
Class 1 pipe sections shall conform to ASTM A 53, Schedule 40, Standard Weights.

An acceptance tolerance for posts for chain link fence will allow deviation from the weight per linear foot specified in the Standard Plans. This tolerance shall be applied on an individual post basis and shall be plus or minus 5 percent for tubular and H-Section posts and plus or minus 6 percent for roll form sections. Materials that exceed the weight per foot or wall thickness specifications may be accepted, providing they do not interfere with the proper construction of the fence.

9-16.1(2)C Pipe Posts, Class 2
Class 2 posts shall be produced by a facility under program quality control. A manufacturer's Certificate of Compliance reflecting the Quality Control Program, shall be the sole basis of acceptance. Uncertified materials must be tested prior to use and shall conform to Class 1.

9-16.3(1) Rail Element
The first paragraph is revised to read:

The W-beam rail element and backup plates shall consist of 12 gage steel formed into a beam not less than 12 inches wide and 3 inches deep. The thrie beam rail element, backup plates, and the transition sections shall consist of 12 gage steel formed into a beam not less than 20 inches wide and 3 inches deep. Thrie beam

for bridge rail retrofit shall consist of 10 gage steel formed into a beam not less than 20 inches wide and 3 inches deep. Terminal sections, except Design F terminal sections, shall consist of 12 gage steel. Design F terminal sections shall consist of 10 gage steel. A tolerance of 3 percent on any dimension of the rail element or Design F terminal section will be allowed. The physical properties of the steel shall conform to AASHTO M 180.

9-16.3(2) Posts and Blocks

The second sentence of the first paragraph is revised to read:

Except for anchor assemblies, all posts for any one project shall be of the same type (wood or steel).

The first paragraph is supplemented with the following:

Post and blocks may be S4S or rough sawn.

9-16.4(2) Wire Mesh

This section is supplemented with the following:

Alternate wire mesh for slope protection shall be double twisted mesh. The mesh shall be of nonraveling construction and consist of a uniform double twisted hexagonal mesh of hot-dip galvanized steel wire having a diameter of 0.120 inch after galvanization. The wire shall be galvanized prior to weaving into mesh and shall conform to ASTM A 641, Class 3, Finish 5, Soft temper. The minimum tensile strength shall be 60,000 psi when tested in accordance with ASTM A 370. Openings shall be hexagonal in shape and uniform in size measuring not more than 3 1/4 inches by 4 1/2 inches, approximately 9 square inches. Lacing wire shall be the same specifications as the wire used in the wire mesh except that its diameter shall be 0.0866 inch after galvanization.

Edges shall be mechanically selvaged in such a manner as to prevent unraveling, and shall develop the full strength of the mesh. The wire used for the selvage shall have a nominal diameter of 0.1535 inch.

9-16.4(3) Wire Rope

This section is revised to read:

Wire rope shall be 5/8-inch diameter zinc coated steel structural wire rope conforming to the requirements of ASTM A 603, Class A.